

REMARKS

Claims 1, 3, 4, 7, 8, 10-12, 14, 17, 18, and 24-26 are pending in this application. Claims 1, 10, 17, and 18 have been amended to define more clearly what Applicant regards as his invention. Claims 24-26 have been added to provide Applicants with a more complete scope of protection. Claims 1, 17, 18, and 24-26 are independent. Favorable reconsideration is requested.

Claims 10 and 11 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite. Claim 10 has been amended to depend from Claim 1. Accordingly, it is believed that the rejection under Section 112, second paragraph, has been obviated, and its withdrawal is therefore respectfully requested.

Claims 1, 7, 8, 15, 17, and 18 were rejected under 35 U.S.C. 103(a) as being obvious from U.S. Patent 6,735,740 to Sakai in view of U.S. Patent 5,260,810 to Kanno, U.S. Patent No. 5,465,307 (Azumaya), U.S. Patent 5,953,464 to Harrington, and U.S. Patent 5,838,839 to Seki; Claims 3-4 and 10-11, as being obvious from Sakai in view of Kanno, Azumaya, Harrington, Seki, and U.S. Patent 5,392,137 to Okubo; Claim 12, as being obvious from Sakai in view of Kanno, Azuyama, Harrington, Seki, and U.S. Patent 5,729,664 to Ishikawa; and Claim 14, as being obvious from Sakai in view of Kanno, Azuyama, Harrington, Seki, and U.S. Patent 5,719,967 to Sekine.

Claim 1 is directed to an image processing apparatus including input means, generating means, first and second pixel density converting means, and output means. The input means inputs color image data, and the generating means generates flag data indicating an attribute of an image corresponding to the color image data from the color

image data, with respect to each pixel of the image. The flag data is indicative of a character, a figure or a mesh with respect to each pixel of the image. The first pixel density converting means pixel-density converts the image data at a designated magnification, and the second pixel density converting pixel-density converts the flag data in accordance with the designated magnification. The output means makes a process of the pixel density converted image data different every pixel in accordance with the flag data and outputs the processed image data. A pixel converting method of the first pixel density converting means is different from a pixel converting method of the second pixel density converting means. The second pixel density converting means makes a converting method different in accordance with attributes of the flag data. The second pixel density converting means, when the designated magnification is reduction, performs an arithmetic operating process of flag values using a plurality of pixels near a target pixel with respect to the flag data indicative of a character and a figure, and performs a processing using a nearest neighboring pixel of the target pixel, with respect to the flag data indicative of a mesh.

Among other notable features of Claim 1 are that the second pixel density converting means, when the designated magnification is reduction, performs an arithmetic operating process of flag values using a plurality of pixels near a target pixel with respect to the flag data indicative of a character and a figure, and performs a processing using a nearest neighboring pixel of the target pixel, with respect to the flag data indicative of a mesh. See, for example, page 25, line 6, to page 26, line 4 of the present specification.^{1/}

^{1/}It is of course to be understood that the references to various portions of the present application are by way of illustration and example only, and that the claims are not limited
(continued...)

The general nature of Sakai, Kanno, Azumaya, Harrington, and Seki has been discussed adequately in previous papers, and it is not believed to be necessary to repeat that discussion.

Sakai discusses that, in the case of reducing and displaying a character image, a partial image of a character and a partial image of a figure are respectively extracted from the character image, and, from among the extracted partial images, the partial image of which priority order is higher is displayed with a large scale.

That is, Sakai discusses that the partial image of a character and the partial image of a figure are respectively reduced in different sizes. However, in Sakai, a reduction system is identical for all of images.

Nothing in Sakai, Kanno, Azumaya, Harrington, and Seki, whether considered either separately or in any permissible combination (if any) would teach or suggest “said second pixel density converting means, when the designated magnification is reduction, performs an arithmetic operating process of flag values using a plurality of pixels near a target pixel with respect to the flag data indicative of a character and a figure, and performs a processing using a nearest neighboring pixel of the target pixel, with respect to the flag data indicative of a mesh,” as recited in Claim 1.

Further, Sakai does not even disclose that a reduction system is different for

1/(...continued)
by the details shown in the portions referred to.

kinds of flag data. Accordingly, it is impossible in Sakai to achieve a specific effect as in the image processing apparatus of Claim 1, in which an error judgment flag of a mesh can be eliminated when image reduction.

Accordingly, Claim 1 is seen to be clearly allowable over Sakai, Kanno, Azuyama, Harrington, and Seki, whether considered separately or in any permissible combination (if any).

Independent Claims 17 and 18 each recite features which are similar in many relevant respects to those discussed above with respect to Claim 1 and therefore are also believed to be patentable over Sakai, Kanno, Azuyama, Harrington, and Seki for at least the reasons discussed above.

Claim 24 is directed to an image processing apparatus. Input means inputs color image data. Generating means generates flag data indicating an attribute of an image corresponding to the color image data from the color image data, with respect to each pixel of the image, the flag data indicative of a character, a figure or a mesh with respect to each pixel of the image. First pixel density converting means pixel density converts the image data at a designated magnification, and second pixel density converting means pixel density converts the flag data in accordance with the designated magnification. Output means makes a process of the pixel density converted image data different every pixel in accordance with the flag data and outputs the processed image data. A pixel converting method of the first pixel density converting means is different from a pixel converting method of the second pixel density converting means. The second pixel density converting means makes a converting method different in accordance with attributes of the

flag data. The second pixel density converting means, when the designated magnification is reduction, performs an arithmetic operating process of flag values using a plurality of pixels near a target pixel with respect to the flag data indicative of a character and a figure, and performs a processing of counting the number of pixels of which flag data is 1 in the peripheral neighboring pixels and setting the pixel after the magnification change to 1 if the counted value exceeds a predetermined value, with respect to the flag data indicative of a mesh.

Among other notable features of Claim 24 are that the second pixel density converting means, when the designated magnification is reduction, performs an arithmetic operating process of flag values using a plurality of pixels near a target pixel with respect to the flag data indicative of a character and a figure, and performs a processing of counting the number of pixels of which flag data is 1 in the peripheral neighboring pixels and setting the pixel after the magnification change to 1 if the counted value exceeds a predetermined value, with respect to the flag data indicative of a mesh. See, for example, page 25, line 6, to page 26, line 4 of the present specification.

As explained above, Sakai discusses that, in the case of reducing and displaying a character image, a partial image of a character and a partial image of a figure are respectively extracted from the character image, and, from among the extracted partial images, the partial image of which priority order is higher is displayed with a large scale.

That is, Sakai discusses that the partial image of a character and the partial image of a figure are respectively reduced in different sizes. However, in Sakai, a reduction system is identical for all of images.

Nothing in Sakai, Kanno, Azumaya, Harrington, and Seki, whether considered either separately or in any permissible combination (if any) would teach or suggest “said second pixel density converting means, when the designated magnification is reduction, performs an arithmetic operating process of flag values using a plurality of pixels near a target pixel with respect to the flag data indicative of a character and a figure, and performs a processing of counting the number of pixels of which flag data is 1 in the peripheral neighboring pixels and setting the pixel after the magnification change to 1 if the counted value exceeds a predetermined value, with respect to the flag data indicative of a mesh,” as recited in Claim 24.

Further, as also explained above, Sakai does not even disclose that a reduction system is different for kinds of flag data. Accordingly, it is impossible in Sakai to achieve a specific effect as in the image processing apparatus of Claim 1, in which an error judgment flag of a mesh can be eliminated when image reduction.

Accordingly, Claim 24 is seen to be clearly allowable over Sakai, Kanno, Azuyama, Harrington, and Seki, whether considered separately or in any permissible combination (if any).

Independent Claims 25 and 26 each recite features which are similar in many relevant respects to those discussed above with respect to Claim 24 and therefore are also believed to be patentable over Sakai, Kanno, Azuyama, Harrington, and Seki for at least the reasons discussed above.

A review of the other art of record has failed to reveal anything which, in Applicant’s opinion, would remedy the deficiencies of the art discussed above, as

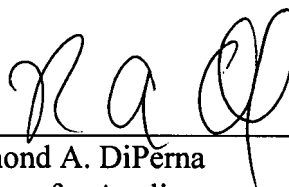
references against the independent claims herein. Those claims are therefore believed patentable over the art of record.

The other claims in this application are each dependent from one or another of the independent claims discussed above and are therefore believed patentable for the same reasons. Since each dependent claim is also deemed to define an additional aspect of the invention, however, the individual reconsideration of the patentability of each on its own merits is respectfully requested.

In view of the foregoing amendments and remarks, Applicant respectfully requests favorable reconsideration and early passage to issue of the present application.

Applicant's undersigned attorney may be reached in our New York office by telephone at (212) 218-2100. All correspondence should continue to be directed to our below listed address.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Ra DiPerna', is written over a horizontal line.

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